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Date of Signature and Deposit: March 25, 2003


Zhibin Ren



PATENT

TECH CENTER 1600/129000
APR 03 2003

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Howard J. Jacob, *et al.*

Date: March 25, 2003

Serial No.: 09/960,234

Group Art Unit: 1631

Filed: September 20, 2001

Examiner: Cheyne D. Ly

Title: Physiological Profiling

File No.: 650053.91657

#14
Plunkett
4/6/03

RESPONSE TO RESTRICTION REQUIREMENTS

Commissioner For Patents
Washington, DC 20231

Dear Sir:

In response to an office communication dated February 26, 2003 imposing a requirement for restriction and election of species on the applicants in the above-identified application, the applicants hereby elect the invention of Group I (Claims 1-6, 21 and 23) drawn to a method for identifying relationships between physiological determinants within a set of physiological determinants. The election is made with traverse.

The Restriction Requirement is traversed on the basis that restriction requirements are optional in all cases (see MPEP § 803). If the search and examination of a set of claims can be made without serious burden, the Examiner must examine them on the merits, even though they may arguably be directed at distinct or independent inventions (see *id.*). In the present application, it is respectfully submitted that claims in Groups I-VII and Groups VIII-X can be examined, respectively, without serious burden on the Office.

Firstly, claims in Groups II, III and VI are closely linked. Claims in these groups involve similar steps of constructing two clustered correlation matrixes and comparing them. Please note that although Claims 17 and 18 (Group VI) use the language of generating a

physiological profile rather than constructing a clustered correlation matrix, the term physiological profile has been defined as a clustered correlation matrix in the specification (see lines 2-5 on page 9 of the application). A proper search for one group would inevitably overlap with that for the others. Under this circumstance, it is not burdensome on the Office to examine these claims together. On the contrary, it will be unnecessarily burdensome on both the applicants and the Office to consider the highly related subject matter in several separate patent applications.

As an aside, in Group II claims, the two matrixes are constructed with correlation values obtained prior to and during/subsequence to a challenge while in Group III claims, the two matrixes are constructed with correlation values obtained at different time points. It is noted that this difference between Group II and Group III claims are similar to that of Claims 17 and 18. The Examiner has classified Claims 17 and 18 into one single group. This is consistent with the notion that Groups II and III claims should be examined together.

Reclassifying Groups II, III and VI into one single group is respectfully requested.

Secondly, claims in Groups IV and V are closely linked. Claims in Group IV involve classifying organisms by comparing their physiological profiles and claims in Group V involve assigning an organism into a subclass by comparing its physiological profile with profiles of other organisms. A proper search for one group would inevitably overlap with that for the other. Accordingly, it is not burdensome on the Office to examine these claims together. On the contrary, it will be unnecessarily burdensome on both the applicants and the Office to consider the highly related subject matter in several separate patent applications. Reclassifying Groups IV and V into one single group is respectfully requested.

Thirdly, claims in Groups I-VII are closely linked. As discussed above, claims in Groups I-VI all involve generating or using physiological profiles, or both. Group VII claims involve a computer-readable medium containing the above-mentioned physiological profiles. Thus, a proper search for one group of claims would inevitably overlap with that for the others and the search results for one has relevance over the others. Accordingly, examination of claims in all these groups can be conducted without serious burden. On the contrary, it will be unnecessarily burdensome on both the applicants and the Office to consider this highly related subject matter in several separate patent applications. Reclassifying Groups I-VII into one single group is respectfully requested.

Finally, claims in Groups VIII-X are closely linked because they all involve the determination of the allelic status of a hypertension-related gene. Therefore, proper searches for these claims would significantly overlap with each other and the search results for one

group of claims have relevance to the others. Accordingly, examination of all these claims can be conducted without serious burden. Reclassifying Groups VIII-X into one single group is respectfully requested.

For the reasons discussed above, it is requested that the restriction requirement with regard to Groups II, III and VI, Groups IV and V, Groups I-VII, and Groups VIII-X be reconsidered and withdrawn.

Wherefore examination on the merits is respectfully requested.

No extension of time is believed to be necessary and no fee is believed to be due in connection with this response. However, if any extension of time is required in this or any subsequent response, please consider this to be a petition for the appropriate extension and a request to charge the petition fee to the Deposit Account No. 17-0055. No other fee is believed to be due in connection with this response. However, if any fee is due in this or any subsequent response, please charge the fee to the same Deposit Account No. 17-0055.

Respectfully submitted,



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**FEE TRANSMITTAL
for FY 2003**

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$) 0.00

Complete if Known

Application Number	09/960,234
Filing Date	September 20, 2001
First Named Inventor	Howard J. Jacob
Examiner Name	Cheyne D. Ly
Group Art Unit	1631
Attorney Docket No.	650053.91657

METHOD OF PAYMENT (check all that apply)☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit Account Number
17-0055Deposit Account Name
Quarles & Brady LLP

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments
☒ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity | Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1001 750	2001 375	Utility filing fee	
1002 330	2002 165	Design filing fee	
1003 520	2003 260	Plant filing fee	
1004 750	2004 375	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1) (\$) 0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	X	= 0.00
Multiple Dependent	-3*** =	X	= 0.00

Large Entity | Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 84	2201 42	Independent claims in excess of 3
1203 280	2203 140	Multiple dependent claim, if not paid
1204 84	2204 42	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity | Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2050 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for <i>ex parte</i> reexamination	
1804 920	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 410	2252 205	Extension for reply within second month	
1253 930	2253 465	Extension for reply within third month	
1254 1,450	2254 725	Extension for reply within fourth month	
1255 1,970	2255 985	Extension for reply within fifth month	
1401 320	2401 160	Notice of Appeal	
1402 320	2402 160	Filing a brief in support of an appeal	
1403 280	2403 140	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,300	2453 650	Petition to revive - unintentional	
1501 1,300	2501 650	Utility issue fee (or reissue)	
1502 470	2502 235	Design issue fee	
1503 630	2503 315	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 750	2809 375	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810 750	2810 375	For each additional invention to be examined (37 CFR § 1.129(b))	
1801 750	2801 375	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00

SUBMITTED BY

Name (Print/Type)	Zhibin Ren	Registration No. (Attorney/Agent)	47,897	Telephone	414.277.5633
Signature				Date	March 25, 2003

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